

**REMARKS/ARGUMENTS**

Claims 1-11 and 25-32 are currently pending in the above-identified application. Claims 12-24 were previously cancelled in response to a restriction requirement. Claims 1, 9, 10 and 25 have been amended. Applicant respectfully requests withdrawal of the outstanding final rejection in light of the following remarks.

Claims 1 and 25 have been amended to correct an antecedent problem. Claim 1 has been amended to recite, *inter alia*, “a first terminal coupled to the circuitry within said die for supplying [a] said first voltage to said circuitry”. Claim 25 has been similarly amended. Claim 9 and 10 have been amended to remove “standard” with respect to Vss and Vcc pads. The amendments are not in response to any rejection for lack of patentability, as will be further explained below.

Claims 1-11 and 25-32 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Green, et al, U.S. Patent No. 6,091,079 (“Green”). This rejection is respectfully traversed.

As recited in claim 1, the present invention is directed to, *inter alia*, a testing apparatus on a die which has, among other things, “a first terminal coupled to the circuitry within said die for supplying [a] ... first voltage to said circuitry ... a second terminal for supplying said first voltage to said first terminal ... a voltage interruption device provided between first and second terminals ... and a first sacrificial terminal for receiving said first voltage from said first sacrificial conductive line and supplying said first voltage to said second terminal.”

The Office Action on page 4, first paragraph, states that Green discloses a first terminal 34 for supplying a first voltage (Vcc) to circuitry within the dies, a second terminal 36 for supplying said first voltage (Vcc) to said first terminal 34, a voltage interruption device 42 provided between said first and second terminals 34, 36 interrupting an electrical coupling between said first and second terminals 34, 36 and a first sacrificial terminal 40 for receiving said first voltage (i.e., Vcc) from said first sacrificial conductive line and supplying said first voltage (i.e., Vcc) to said second terminal 36.

The Office Action on page 2 also states that Green discloses “a second terminal 36 for supplying said first voltage to said first terminal ... and a first sacrificial terminal 40 for receiving said first voltage from said first sacrificial conductive line and supplying said first voltage to said second terminal ....” Applicant respectfully disagrees with this Office Action statement.

Green, at FIG. 11 and Col. 4, lines 28-58, clearly discloses (contrary to the Office Action assertion), that sacrificial pad 40 receives a first voltage from pad 36 and does not supply a first voltage from a sacrificial conductive line (i.e., sacrificial bus 24) to terminal 36. Rather pad 40 supplies a first voltage to test circuitry on top of the die, and does not supply a first voltage to sacrificial pad 36. (Col. 4, lines 51-60)

Green also does not disclose that a voltage interruption device is positioned between first terminal 34 and second terminal 36. Indeed, Green states at col 4, lines 52-58 that “sacrificial Vcc pad 36 and sacrificial Vss pad 38 are [respectively] connected by circuitry on the die to the permanent Vcc pad and the Vss pad of peripheral pads 32, 34 ....” and further states at Col. 5, lines 11-14 that fuse 42 is provided between “the Vcc bus

24 and individually Vcc sacrificial pads 36". The fuse is not provided between terminals 34 and 36 identified in the Office Action as corresponding to the recited first and second terminal.

Accordingly, there is no disclosure of, *inter alia*, a voltage interruption device 42 between the first and second terminals that interrupts electrical coupling between the first and second terminals, as recited in claim 1.

In view of the foregoing arguments, Applicant requests withdrawal of the rejection of claim 1 and allowance of claim 1. Claims 2-8 depend from claim 1, and are allowable along with claim 1, and for other reasons.

Independent claim 9 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Green. This rejection is respectfully traversed.

Amended claim 9 recites "a Vcc bonding pad coupled to the circuitry within said die for supplying a first voltage to said circuitry ... a secondary Vcc bonding pad ... a fuse interconnected between the Vcc bonding pad and the secondary Vcc bonding pad, said secondary Vcc bonding pad supplying said first voltage through said fuse to the Vcc bonding pad ... a sacrificial Vcc bonding pad for receiving said first voltage ... and a sacrificial metal bus interconnected between the sacrificial Vcc bonding pad and secondary Vcc bonding pad for receiving said first voltage from the sacrificial Vcc bonding pad and supplying said first voltage to the secondary Vcc bonding pad."

Again, Green's FIG. 3 does not anticipate claim 9. Instead, Green discloses the fuse 42 is between the sacrificial bus 24 and the sacrificial pad 36, not between pad 34 and pad 36.

Accordingly, Applicant requests withdrawal of the rejection of claim 9 and allowance of same. Claims 10-11 depend from claim 9, thus are allowable along with claim 9, and for other reasons.

Independent claim 25 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Green. This rejection is respectfully traversed.

Claim 25 recites, *inter alia*, "at least one first sacrificial conductive line ... a ... die comprising ... a first terminal coupled to the circuitry within said die ... a voltage interruption device coupled to said first terminal ... a second terminal coupled to said voltage interruption device, said interruption device for interrupting an electrical coupling between said first and second terminals ... and a first sacrificial terminal electrically coupled to said second terminal for receiving said first voltage from said first sacrificial conductive line ...."

Again, Green does not disclose, *inter alia*, "a voltage interruption device coupled to said first terminal ... a second terminal coupled to said voltage interruption device." Rather Green discloses a voltage interruption device 42 coupled to a second terminal 36 and a sacrificial bus 24 for interrupting power between the bus 24 and the second terminal 36, not between Green's pad 34 and sacrificial pad 36.

Accordingly, Applicant requests withdrawal of the rejection of claim 25 and allowance of same. Claims 26-32 depend from claim 25 and thus are allowable along with claim 25, and for other reasons.

Applicant also requests withdrawal of the final rejection as the Office Action did not adequately address Applicant's arguments previously filed on December 19, 2002 for the reasons stated above.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Dated: June 3, 2003

Respectfully submitted,

By 

Thomas J. D'Amico

Registration No.: 28,371

Christopher A. Monsey

Registration No.: 53,343

DICKSTEIN SHAPIRO MORIN &  
OSHINSKY LLP

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

Attorneys for Applicant

**Version With Markings to Show Changes Made**

1. (Currently Amended) A semiconductor wafer comprising:

at least one first sacrificial conductive line for supplying a first voltage to a plurality of dies fabricated on said wafer;

a plurality of integrated circuit dies fabricated on said wafer, each die comprising:

a first terminal coupled to the circuitry within said die for supplying [a] said first voltage to said circuitry;

a second terminal for supplying said first voltage to said first terminal;

a voltage interruption device provided between first and second terminals for interrupting an electrical coupling between said first and second terminals; and

a first sacrificial terminal for receiving said first voltage from said first sacrificial conductive line and supplying said first voltage to said second terminal.

9. (Currently Amended) A semiconductor die comprising:

a [standard] Vcc bonding pad coupled to the circuitry within said die for supplying a first voltage to said circuitry;

a secondary Vcc bonding pad;

a fuse interconnected between the [standard] Vcc bonding pad and the secondary Vcc bonding pad, said secondary Vcc bonding pad supplying said first voltage through said

fuse to the [standard] Vcc bonding pad, said fuse adapted for interrupting electrical coupling between the secondary Vcc bonding pad and said [standard] Vcc bonding pads when the die draws current in excess of said fuse breakdown current;

a sacrificial Vcc bonding pad for receiving said first voltage; and

a sacrificial metal bus interconnected between the sacrificial Vcc bonding pad and secondary Vcc bonding pad for receiving said first voltage from the sacrificial Vcc bonding pad and supplying said first voltage to the secondary Vcc bonding pad.

10. (Currently Amended) The semiconductor wafer of claim 9 further comprising:

a Vss bonding pad coupled to the circuitry within said die for supplying a second voltage to said circuitry;

a sacrificial Vss bonding pad for supplying the second voltage to the [standard] Vss bonding pad; and

a sacrificial metal bus which connects the sacrificial Vss bonding pad and the [standard] Vss bonding pad.

25. (Currently Amended) A semiconductor wafer comprising:

at least one first sacrificial conductive line for supplying a first voltage to a plurality of dies fabricated on said wafer;

a plurality of integrated circuit dies fabricated on said wafer, each die comprising:

a first terminal coupled to the circuitry within said die for supplying [a] said first voltage to said circuitry;

a voltage interruption device coupled to said first terminal;

a second terminal coupled to said voltage interruption device, said interruption device for interrupting an electrical coupling between said first and second terminals; and

a first sacrificial terminal electrically coupled to said second terminal for receiving said first voltage from said first sacrificial conductive line and supplying said first voltage to said second terminal.